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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,442	05/31/2001	Bomi M. Bilimoria	07990.0023	1219

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EXAMINER

LOVERING, RICHARD D

ART UNIT PAPER NUMBER

1712

DATE MAILED: 06/07/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

T.D-2

# Office Action Summary

Application No. <b>09/870,442</b>	Applicant(s) <b>BILIMORIA</b>	
Examiner <b>LOVERING</b>	Group Art Unit <b>1712</b>	

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## P riod for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-42 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-42 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Pri rity under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

\*Certified copies not received: \_\_\_\_\_.

## Attachment(s)

- ☐ Information Disclosur Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892 ✓
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 37-39 and 42 are rejected under 35

U.S.C. § 102(b) as being clearly anticipated or at least anticipated by Smith 3,963,640, esp. column 6, line 63 - column 8, line <sup>2</sup>3, noting that the product is a stable dispersion in water - column 1, lines 56-62.

4. Claims 1-11, 13, 17, 32, 37-39, 41 and 42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakazawa et al. 4,622,166. The instantly-claimed method for improving the shear rheology of

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col 5 also applied rotor stator beads

a fluid particulate suspension and resulting product are anticipated by Nakazawa et al. (esp. Example 7), or are at least clearly within the purview of Nakazawa et al., and thus would have been obvious therefrom to one having ordinary skill in the art at the time applicant's invention was made. The colloid mill used in patentees' Example 7 is known to be of the rotor-stator type. Addressing the 103 aspects of this ground of rejection: As to claims 4 and 6 herein, Nakazawa et al.'s disclosure of the use of water-soluble acrylic resins as dispersants (column 8, lines 39-51, esp. line 51) renders the use of Na polyacrylate prima facie obvious. As to claim 11 herein, the use of a Kady mill instead of a colloid mill in Example 7 of Nakazawa et al. is rendered prima facie obvious by patentees' disclosure of their interchangeability in column 9, lines 28-37. As to claim 32 herein, zeolites are notoriously old as pigments, although Nakazawa et al. do not specifically disclose this.

5. Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakazawa et al. above in view of Weiser "A Textbook of Colloid Chemistry", 2d edition (1949) page 158. (7)

The especially pertinent portions of Nakazawa et al. are pointed out in the preceding paragraph. While Nakazawa et al. don't specifically disclose the use of a mill having conically shaped stators and rotors, it would have been obvious to one skilled in the art at the time applicant's invention was

new art

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Millman et al. 2-5  
 esp 1-5, 8-11, 13, 15-16, 32, 33, 38, 41 & 42

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made to use such a mill instead of a colloid mill in Example 7 of Nakazawa et al. in view of the disclosure of their interchangeability by Weiser above.

6. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 2, 5 and 10-42 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

*help ✓* *22 & 43*  
a) Claims ~~5~~ and 22 recite Markush groups which are not considered proper for the reason that they are indefinite as to scope in reciting "at least", which should be cancelled; and *OK*

b) claims 1, 2 and 10-42 are vague and indefinite as to scope in not reciting, as they should, that the continuous phase of the suspensions is water or an aqueous medium. (See paragraph bridging pages 8 and 9 of the specification.)

8. Claims 14-16, 18-31, 33-36 and 40 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112 set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record

*previously - 2nd Ob. 18 & 33*

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doesn't disclose or fairly suggest the embodiments of applicant's method employing beneficiation or dewatering of the product or employing kaolin clay, <sup>Si</sup>CaCO<sub>3</sub> or synthetic silica as a starting material.

10. The remaining references <sup>X</sup> listed on the attached Form PTO-892 are cumulative to the references applied herein, and/or further show the state of the art.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lovering whose telephone number is (703) 308-0443. The examiner can normally be reached on Mon.-Fri. from 7:30 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson, can be reached on (703) 308-2340. The fax phone number for this Group is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

R. Lovering:cdc  
June 5, 2002

*Richard D. Lovering*  
RICHARD D. LOVERING  
PRIMARY EXAMINER  
GROUP 1700